

Received and needed social support in relation to sociodemographic and socio-economic factors in a population of people on sick leave due to heart failure

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Abstract

Aims The aim of this study was to determine differences between sociodemographic and socio-economic factors for perceptions of received and needed social support in a population of people on sick leave due to heart failure.

Methods and results A cross-sectional design was used. A postal questionnaire was distributed to all people in Sweden who had been sick listed due to heart failure during March to May 2012 ($N = 1297$). The questionnaire measured perceptions of received and needed social support from managers, colleagues at work, family and friends. Differences between groups were estimated with the Mann–Whitney U-test. The sample included 414 men and 176 women aged 23 to 67 years (mean 58, median 60, SD = 6.75). Respondents with low income received significantly less support than respondents with high income and also needed significantly more support. Respondents with lower educational level needed significantly more support than people with higher education. Unmarried respondents needed significantly more support than married.

Conclusions People with lower level of education, those who were unmarried and respondents with low income needed more support than they received. By identification of vulnerable patients, healthcare professionals can tailor and target supportive measures for patients who need extra social support.

Keywords Cross-sectional; Heart failure; Sick leave; Social support

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Introduction

People with heart failure are often sick listed for long periods, and some will never be able to return to work.^{1–3} However, knowledge regarding social support for people on sick leave due to heart failure is scarce. It is reasonable, though, to believe that a person with heart failure who wants to return to working life (if possible) may perceive different needs for support than a person who is finished with working life. In patients with heart failure, poor social support has been described as associated with socio-economic factors.^{4–6} It has also been described as associated with more rehospitalizations, higher mortality, poor quality of life, and

higher levels of anxiety and depression.^{4,6–9} Then again, reinforced and/or increased social support can improve heart failure patients' quality of life.⁵

Social support can facilitate sick listed peoples' return-to-work processes.^{10,11} However, different actions from different sources can be perceived as more or less supportive considering the circumstances.¹² Studies of social support usually concern functional content of social relationships, that is, emotional, instrumental, informational, and/or appraisal support.^{4,7,13} Thus, functional support involves aid and encouragement provided by people within the individual's social network, usually defined as family and/or friends.¹⁴ Social support can also be studied in terms of

received, perceived, or needed support,^{5,7–9,12,15} or regarding structural components, that is, the individual's informal or formal sources for support (for example family and/or friends).^{12,14–16} In relation to people with long-term sickness absence, social support from managers and/or colleagues at work also can be studied.^{12,15} Different sources for support, for example, family vs. managers, can be assumed to provide different sorts of support. For people on sick leave due to heart failure, social insurance officers and healthcare professionals have been described as potentially supportive sources.^{2,17,18}

In order to develop and design effective interventions and rehabilitation programmes as well as clinical guidelines that concern heart failure patients' return to work processes, more knowledge is needed about the patients' perceptions of social support. A recent Danish study describes younger age, male gender, higher educational level, and higher income as possible predictors for return to work in people with heart failure.³ But the relation between social support and socio-economic status in people with heart failure has previously been described as complicated and needs to be further defined.¹⁹ The aim of the present study was to investigate heart failure patients' perceptions of received and needed social support from different sources. More specifically, we aimed to determine differences between sociodemographic and socio-economic factors with regard to received and needed support from managers, colleagues at work, family, and friends.

Methods

In this study, a cross-sectional design was used. Data were collected in 2012 in Sweden by a postal questionnaire. Data regarding sociodemographic factors (gender, age, country of birth) and socio-economic factors (marital status, level of education, annual income) were obtained from Sweden Statistic's population registry. The study was approved by the regional ethical vetting board.

Sample

To identify the study population (people registered under the diagnosis I50 Heart failure, entitled to sick leave compensation during March to May 2012), the Swedish Social Insurance Agency's sick leave registry was used. The total population consisted of 1297 individuals.

Data collection

The postal questionnaire was very comprehensive and consisted of several parts. This article reports on one part

that concerned received and needed support from different sources (managers, colleagues at work, family, and friends). This part of the questionnaire was based on the Structural-Functional Social Support Scale (SFSS), which was developed for assessment of social support in people with severe chronic illness.^{12,15,16} The scale measures functional support (emotional, instrumental, and informational support) and structural support (support from different sources). The statements differed slightly depending on what kind of support each source could offer. For support from managers and colleagues at work, there were two statements about emotional support ('Stayed in contact during the illness period' and 'Showed compassion and understanding'), one statement concerned instrumental support ('Considered the illness when planning tasks at work'), and there was one statement about informational support ('Gave advice about how to manage working life'). For family and friends there were two statements about emotional support ('Stayed in contact during the illness period' and 'Showed compassion and understanding'), and one statement concerning instrumental support ('Helped with practical matters').

The respondents were asked to agree or disagree to the different statements about how much support they had received support from each source.¹² For received support, the items were scored on a four-point Likert scale from 1 ('Strongly disagree') to 4 ('Strongly agree'). In addition, the respondents were asked to rate how satisfied they were with the amount of received support, that is, if they received the amount of support that they needed. Needed support were ranked on a three-point Likert scale from 1 ('Hoped for more') to 3 ('Hoped for less').¹²

Data analyses

All respondents did not provide answers for all statements. Consequently, the results are based on the valid responses where no missing data were replaced. Data were analysed in Excel and in SPSS (version 22). Age, level of education, and income were dichotomized based on their respective median (23 to 60/61 to 67; lower/higher; low/high).

First, descriptive analyses were conducted (total scores, mean, median, interquartile range). Next, total scores for received and needed support respectively were calculated. Thereafter, the Mann-Whitney U-test was used to determine differences between sociodemographic and socio-economic groups (independent variables). The statements about received and needed functional and structural support were used separately or in different combinations (dependent variable/s) (see Box 1).

Differences between groups were identified by their mean ranks.²⁰ Approximate effect sizes, r , were calculated (the z-score was divided with the square root of the total number of observations). The effects sizes are interpreted as: $r \leq 0.30$

small effect, $r \leq 0.50$ moderate effect, and >0.50 strong effect.²⁰ The significance level was set at <0.05 .

Ethical considerations

The local ethical vetting board approved the research protocol. Informed consent was obtained from the subjects by return of the questionnaire. The investigation conforms with the principles outlined in the Declaration of Helsinki (Br Med J 1964; ii: 177).

Results

A total of 590 individuals responded to the postal questionnaire (response rate 45.6%). The respondents were 414 men (70.2%) and 176 women (29.8%) aged 23 to 67 years (mean 58, median 60, SD = 6.753). Out of these, 491 (83.2%) were Swedish-born, 316 (53.6%) were married, 445 (75.4%) had higher education than compulsory school, and 482 (81.7%) had an annual income over €15945.

Received support

With regard to received structural support, the strongest effect size (r) was found between the high and the low income groups for overall support from all sources ($r = 0.38$) (Table 1). The strongest effect size regarding received functional support was found between the high and the low income groups for emotional support from all sources ($r = 0.38$) (Table 2). The strongest effect size for separate items about received support was found between the higher and the lower education groups and concerned colleagues at work to show compassion and understanding ($r = 0.24$) (Table 3).

The high income group received overall significantly more support than the low income group from all sources, from colleagues at work and from family/friends (Table 1). They also received significantly more emotional and instrumental support than the low income group from all sources. In addition, the high income group received significantly more emotional support than the low income group from work and from family/friends (Table 2). The item-by-item analysis showed that the high income group perceived significantly more than the low income group that both colleagues at work and friends stayed in contact during the illness period (Tables 3 and 4).

The higher education group received overall significantly more support than the lower education group from colleagues at work, from work (managers/colleagues), and from family/friends (Table 1). They also received significantly more emotional support than the lower education group from all sources, work, and family/friends (Table 2). The item-by-item analysis showed that the higher education group perceived

significantly more than the lower education group that managers and colleagues at work respectively showed compassion and understanding, and that colleagues at work considered the illness when planning tasks at work (Table 3).

The Swedish-born group received overall significantly more support than the non-Swedish born group from all sources and from family/friends (Table 1). They also received significantly more emotional and instrumental support than the non-Swedish born group from all sources. The Swedish-born group also received significantly more emotional support from family/friends (Table 2). The item-by-item analysis showed that the non-Swedish born group to a significantly higher degree than the Swedish-born group perceived that colleagues at work gave advice about how to manage working life (Table 3).

The married group received overall significantly more support than the unmarried group from family and from family/friends (Table 1). They also received significantly more instrumental support than the unmarried group from all sources. The married group also received significantly more informational support than the unmarried group from work and significantly more emotional support from family/friends (Table 2). The item-by-item analysis showed that the married group perceived significantly more than the unmarried group that their family stayed in contact during the illness period and also helped with practical matters (Table 4).

The '23 to 60' group received overall significantly more support than the '61 to 67' group from all sources (Table 1). They also received significantly more emotional and instrumental support from all sources (Table 2).

Needed support

For needed structural support, the strongest effect size was found for the difference between the high and the low income groups regarding overall support from all sources ($r = 0.37$) (Table 5). Concerning needed functional support, the strongest effect sizes were found for differences between the high and the low income groups with respect to emotional and instrumental support from all sources ($r = 0.37$ and $r = 0.37$, respectively) (Table 6). The strongest effect size for separate items about needed support was found for the difference between the married and the unmarried groups regarding managers to consider the illness when planning tasks at work ($r = -0.25$) (Table 3).

The low income group needed overall significantly more support than the high income group from all sources, from colleagues at work, from work, and from family/friends (Table 5). They also needed significantly more emotional and instrumental support from all sources than the high income group. The low income group also needed significantly more informational support than the high income group from work and more emotional and instrumental support from

Table 1 Received structural support. Significant differences between sociodemographic groups for received support with regard to structural components (different sources of support). Variables are reported with number of respondents (*n*), medians (Mdn), and values for interquartile ranges (IQR). Higher values indicate more support. The results of the Mann–Whitney U-tests are reported with effect sizes (*r*) and significance values (*P*)

Source; possible score	<i>n</i>	Received support		<i>r</i>	<i>P</i>
		Mdn	IQR		
All sources; 1–56					
All	543	24	20–40		
Age				–0.15	<0.001
–23 to 60	285	28	20–42		
–61 to 67	258	23	19–34		
Country of birth				–0.10	0.017
–Sweden	458	24	20–40		
–Non-Swedish	85	23	12–36		
Income				0.38	<0.001
–Low	264	22	16–27		
–High	279	34	22–44		
Colleagues at work; 1–16					
All	264	11	8–13		
Level of education				0.17	0.007
–Lower	61	10	7–12		
–Higher	203	11	8–14		
Income				0.12	0.041
–Low	76	10	7–12		
–High	188	11	8–14		
Work ^a ; 1–32					
All	292	20	13–25		
Level of education				0.13	0.027
–Lower	66	17	12–23		
–Higher	226	20	14–26		
Income				0.18	0.002
–Low	92	16	10–24		
–High	200	20	15–26		
Family; 1–12					
All	482	12	11–12		
Marital status				0.10	0.024
–Married	282	12	11–12		
–Unmarried	200	12	10–12		
Family/friends; 1–24					
All	527	20	15–23		
Country of birth				–0.09	0.038
–Sweden	447	20	16–24		
–Non-Swedish	80	19	12–23		
Marital status				0.12	0.005
–Married	291	21	17–24		
–Unmarried	236	20	12–23		
Level of education				0.10	0.020
–Lower	117	20	12–23		
–Higher	410	21	16–24		
Income				0.12	0.006
–Low	253	20	12–23		
–High	274	21	17–24		

^aManagers and colleagues at work collectively.

family/friends (Table 6). The item-by-item analysis showed that the low income group to a significantly higher degree than the high income group needed colleagues at work to stay in contact during the illness period and to give advice about how to handle working life (Table 3). They also, to a significantly larger extent, needed both family and friends to stay in contact during the illness period, and they needed friends to show compassion and understanding (Table 4).

The unmarried group needed overall significantly more than the married group support from family, friends, and family/friends (Table 5). They also needed significantly more

emotional and instrumental support from all sources and from family/friends (Table 6). The item-by-item analysis showed that the unmarried group to a significantly larger extent than the married group needed managers to consider the illness when planning tasks at work (Table 3). They also needed, to a significantly larger extent, the family to stay in contact during the illness period and to help with practical matters, and significantly more, they needed friends to show compassion and understanding (Table 4).

Women needed significantly more support from their family than men (Table 5). The item-by-item analysis showed that

Table 3 Received and needed support from managers and colleagues at work. Significant differences between sociodemographic groups for each questionnaire item about received and needed support from managers and colleagues at work. Variables are reported with number of respondents (*n*), medians (Mdn), and values for interquartile ranges (IQR). Higher values indicate more support/being more satisfied. The results of the Mann–Whitney U-tests are reported with effect sizes (*r*) and significance values (*P*)

	Received support					Needed support				
	Possible score 1–4					Possible score 1–3				
	<i>n</i>	Mdn	IQR	<i>r</i>	<i>P</i>	<i>n</i>	Mdn	IQR	<i>r</i>	<i>P</i>
My manager has ...										
... showed compassion and understanding										
All	247	3	3–4							
Level of education				0.14	0.029					
-Lower	51	3	3–4							
-Higher	196	4	3–4							
... given me advice about how to manage working life										
All						199	2	1–2		
Age									0.17	0.017
-23 to 60						126	2	1–2		
-61 to 67						73	2	2–2		
... considered my illness when planning tasks at work										
All						203	2	1–2		
Country of birth									-0.15	0.038
-Sweden						177	2	2–2		
-Non-Swedish						26	2	1–2		
Marital status									-0.25	0.001
-Married						112	2	2–2		
-Unmarried						91	2	1–1		
My colleagues at work have ...										
... stayed in contact during my illness period										
All	228	2	3–4			211	2	2–2		
Gender									-0.14	0.048
-Men						145	2	2–2		
-Women						66	2	2–2		
Income				0.14	0.032				0.17	0.014
-Low	61	3	2–4			54	2	1–2		
-High	167	3	3–4			157	2	2–2		
... showed compassion and understanding										
All	256	4	3–4			213	2	2–2		
Gender									-0.19	0.005
-Men						144	2	2–2		
-Women						69	2	2–2		
Level of education				0.24	<0.001					
-Lower	58	3	3–4							
-Higher	198	4	3–4							
... given me advice about how to manage working life										
All	209	3	2–3			199	2	2–2		
Country of birth				0.15	0.031					
-Sweden	180	2	2–3							
-Non-Swedish	29	3	3–4							
Income									0.21	0.004
-Low						50	2	2–2		
-High						149	2	2–2		
... considered my illness when planning tasks at work										
All	218	3	2–4							
Level of education				0.16	0.015					
-Lower	50	3	2–3							
-Higher	168	3	3–4							

women to a significantly larger extent than men needed colleagues at work to stay in contact during the illness period and to show compassion and understanding (Table 3). They also needed family and friends to show compassion and understanding significantly more than men (Table 4).

The '61 to 67' group needed significantly overall more support than the '23 to 60' group (Table 5) and also more emotional and instrumental support (Table 6) from all sources.

The item-by-item analysis showed that the '23 to 60' group to a significantly larger extent than the '61 to 67' group needed managers to give advice about how to manage working life (Table 3).

The non-Swedish born group to a significantly higher degree than the Swedish-born group needed overall more support from all sources (Table 5). The item-by-item analysis showed that the non-Swedish born group significantly more

Table 4 Received and needed support from family and friends. Significant differences between sociodemographic groups for each questionnaire item about received and needed support from family and friends. Variables are reported with number of respondents (*n*), medians (Mdn), and values for interquartile ranges (IQR). Higher values indicate more support/being more satisfied. The results of the Mann–Whitney U-tests are reported with effect sizes (*r*) and significance values (*P*)

Questionnaire item	Received support					Needed support				
	Possible score 1–4					Possible score 1–3				
	<i>n</i>	Mdn	IQR	<i>r</i>	<i>P</i>	<i>n</i>	Mdn	IQR	<i>r</i>	<i>P</i>
My family has ...										
... stayed in contact during my illness period										
All	460	4	4–4			384	2	2–2		
Marital status				0.14	0.002				–0.13	0.009
-Married	268	4	4–4			227	2	2–2		
-Unmarried	192	4	4–4			157	2	2–2		
Income									0.13	0.011
-Low						174	2	2–2		
-High						210	2	2–2		
... showed compassion and understanding										
All						381	2	2–2		
Gender									–0.13	0.009
-Men						248	2	2–2		
-Women						133	2	2–2		
... helped me with practical matters										
All	460	4	4–4			377	2	2–2		
Marital status				0.15	0.001				–0.10	0.042
-Married	269	4	4–4			221	2	2–2		
-Unmarried	191	4	3–4			156	2	2–2		
My friends have...										
... stayed in contact during my illness period										
All	453	4	3–4			361	2	2–2		
Income				0.10	0.029				0.12	0.025
-Low	215	4	3–4			161	2	2–2		
-High	238	4	3–4			200	2	2–2		
... showed compassion and understanding										
All						357	2	2–2		
Gender									–0.11	0.043
-Men						240	2	2–2		
-Women						117	2	2–2		
Marital status									–0.13	0.005
-Married						198	2	2–2		
-Unmarried						159	2	2–2		
Income									0.15	0.005
-Low						160	2	2–2		
-High						197	2	2–2		

than the Swedish-born group needed managers to consider the illness when planning tasks at work (Table 3).

The lower education group needed significantly overall more support from work than the higher education group (Table 5).

Discussion

This study revealed some interesting and novel insights about social support in a population on sick leave due to heart failure. On basis of the present study, it can be determined that inequalities exist between different socio-economic groups regarding social support for heart failure patients during sick leave. It has previously been described that socio-economic deprivation implies health inequalities for people with heart failure.^{19,21} In addition, a review from 2013 states that people

with lower socio-economic status commonly have lower social capital than people with higher socio-economic status,²² and low social capital was described as associated with inequalities in health.²² Thus, the present findings that showed that primarily people with lower income disagreed to the statements about received support and perceived they needed more support from different sources were in line with previous studies. In the present study, annual income was defined as an income less than €15900 per year which from a Swedish perspective is rather low (the definition was made by Statistics Sweden that handled the distribution of the postal questionnaire and the initial data collection). It seems reasonable to believe that people with low income have been fully or partly excluded from the labour market, for example, by being unemployed, part-time employed, or on long-term sick leave. It is known that long-term sick leave or disability pension can have considerable financial consequences for many people.²³ In addition, in people under the age of 60–65, depressive

Table 5 Needed structural support. Significant differences between socio-demographic groups for needed support with regard to structural components (different sources of support). Variables are reported with number of respondents (*n*), medians (Mdn), and values for interquartile ranges (IQR). Higher values indicate being more satisfied. The results of the Mann-Whitney U-tests are reported with effect sizes (*r*) and significance values (*P*)

Source; possible score	Needed support				
	<i>n</i>	Mdn	IQR	<i>r</i>	<i>P</i>
All sources; 1–42					
All	458	12	10–24		
Age				–0.18	<0.001
–23 to 60	241	17	12–25		
–61 to 67	217	12	8–20		
Country of birth				–0.12	0.011
–Sweden	388	13	11–24		
–Non-Swedish	70	12	6–22		
Income				0.37	<0.001
–Low	213	12	7–14		
–High	245	20	12–27		
Colleagues at work; 1–12					
All	221	8	6–8		
Income				0.19	0.005
–Low	57	8	4–8		
–High	164	8	7–8		
Work ^a ; 1–24					
All	249	14	8–16		
Level of education				0.14	0.026
–Lower	59	12	6–16		
–Higher	190	14	8–16		
Income				0.20	0.002
–Low	74	10	6–16		
–High	175	14	9–16		
Family; 1–9					
All	390	6	6–6		
Gender				–0.13	0.012
–Men	254	6	6–6		
–Women	136	6	6–6		
Marital status				–0.10	0.050
–Married	230	6	6–6		
–Unmarried	160	6	6–6		
Friends; 1–9					
All	365	6	6–6		
Marital status				–0.13	0.019
–Married	201	6	6–6		
–Unmarried	164	6	6–6		
Family/friends; 1–18					
All	429	12	6–12		
Marital status				–0.18	<0.001
–Married	237	12	10–12		
–Unmarried	192	12	6–12		
Income				0.17	<0.001
–Low	201	12	6–12		
–High	228	12	10–12		

^aManagers and colleagues at work collectively.

symptoms are more common than in older people.²⁴ This can be caused by a loss of social networks when the ill person is no longer capable of working.²⁴ Then again, to lose one's income or to be on social benefits can contribute to concerns, anxiety, or low mood. There are many reasons for individuals to value a possibility to return to work. Therefore, different individuals can have different reasons for wanting or needing to get back to work. Social capital, such as social support from family and friends or managers and colleagues at work, can buffer some

negative effects that lower socio-economic status can have on health.²² Furthermore, to feel valued and appreciated can have major impact on people's self-image and identity.²⁵ An improved self-image can reduce the suffering of the individual, thus reducing anxiety, low mood, and depressive symptoms. People that live on their own and people with lower educational level are socially exposed in similar ways as people with lower income. Thus, the reasoning above can be applied also in relation to these groups.

The results also revealed some other differences. For the low and high income groups, the distribution between significant differences for received and needed support was comparable. That is, an equal distribution of differences was found for both received and needed support. By contrast then, for the lower and higher educational groups, significant differences did not equal up because for received support, there were more significant differences than for needed support. For marital status, the opposite was noted, that is, there were more significant differences for needed support than for received support. However, no causal conclusions can be drawn on basis of these findings since this study was cross-sectional, but the findings raises some questions: Could it be that people with lower education did not need more support than people with higher education even though they received less support? And could it be that unmarried people to a greater extent than married people needed support from family and friends even though they received equal amounts of support? Or do the findings simply mean there were no differences between the groups? It has previously been described that lower socio-economic status in general, and lower educational level in particular, is associated with a higher risk for heart failure.²⁶ It has also been described that depressive symptoms and being unmarried can predict increased morbidity and mortality in people with heart failure.^{4,6} Researchers have also argued that the relation between socio-economic factors and heart failure is complex and little understood, and that more research is needed.^{19,26} The present findings underscore this.

The responses about functional and structural support are also somewhat difficult to interpret. With regard to received support, no startling results were found that concerned functional content or structural components. Regarding needed support, significant differences primarily concerned the respondents' perceptions of support from family and/or friends. The difficulties to interpret the findings can be partly explained by the lack of previous research concerning social support and sick leave for this particular population. However, the interpretation difficulties can also depend on limitations brought on by the study itself. That is, a rather low response rate, partial non-responses, and that the questionnaire had not been previously tested and validated in relation to this particular context and population. The response rate was 45.6%. The formulation of the questions together with inconsistencies between the response options for received and needed support resulted in a rather large partial non-response rate (between 28.2 and

Table 6 Needed functional support. Significant differences between socio-demographic groups for needed support concerning functional content (emotional, instrumental, and informational support). Variables are reported with number of respondents (*n*), medians (Mdn), and values for interquartile ranges (IQR). Higher values indicate being more satisfied. The results of the Mann–Whitney U-tests are reported with effect sizes (*r*) and significance values (*P*)

	Needed support														
	Emotional					Instrumental					Informational				
	All sources														
	Possible score 1–24					Possible score 1–12					Possible score 1– 6				
	<i>n</i>	Mdn	IQR	<i>r</i>	<i>P</i>	<i>n</i>	Mdn	IQR	<i>r</i>	<i>P</i>	<i>n</i>	Mdn	IQR	<i>r</i>	<i>P</i>
All	455	8	7–14			433	4	4–7							
Age				–0.17	<0.001				–0.16	0.001					
-23 to 60	239	10	8–14			232	5	4–7							
-61 to 67	216	8	5–12			201	4	3–6							
Marital status				–0.11	0.025				–0.10	0.044					
-Married	250	8	8–14			238	4	4–7							
-Unmarried	205	8	6–13			195	4	3–6							
Income				0.37	<0.001				0.37	<0.001					
-Low	212	8	4–8			199	4	3–4							
-High	243	12	8–16			234	6	4–8							
	Work ^a														
	Possible score 1–12					Possible score 1– 6					Possible score 1– 6				
All	243	7	4–8			229	4	2–4			226	4	2–4		
Income				0.18	0.005				0.16	0.014				0.19	0.004
-Low	71	6	4–8			64	2	2–4			64	3	2–4		
-High	172	8	5–8			165	4	3–4			162	4	3–4		
	Family/friends														
	Possible score 1–12					Possible score 1– 6					—				
All	428	8	4–8			413	4	2–4							
Marital status				–0.17	<0.001				–0.19	<0.001					
-Married	237	8	6–8			228	4	3–4							
-Unmarried	191	8	4–8			185	4	2–4							
Income				0.16	0.001				0.15	0.003					
-Low	200	8	4–8			192	4	2–4							
-High	228	8	6–8			221	4	3–4							

^aManagers and colleagues at work collectively.

40.2%). However, the SFSS questionnaire has previously been described as having good internal consistency for the total scale and also for all sub scales.¹⁶

In spite of these limitations, we can state that with respect to people sick listed due to heart failure, there are inequalities that primarily concern socio-economic factors such as income, level of education, and marital status. It is important for healthcare professionals to be aware of inequalities and to consider them when planning for rehabilitation and return to work processes. Healthcare professionals involved in rehabilitation for younger patients with heart failure need to include return to work as a goal and also to discuss this with the patients. Rehabilitation plans should be set up jointly with patients. At present, however, clinical guidelines and recommendations for vocational rehabilitation are often lacking with regard to people with heart failure. In addition, there is no evidence regarding appropriate methods or interventions that can support return to work processes for people with heart failure.

Conclusions

People with lower level of education and those who were unmarried received less support than they needed. Respondents with low income received less social and emotional support than they needed. If patients want to go back to work and are physically capable of it, then return to work should be considered a realistic and relevant goal. Screening of low mood and/or depressive symptoms as well as assessment of patients' available social support should be integral parts and considered equally important as information and education about medications, treatments, and self-care, when setting up rehabilitation plans. Systematically tested and evaluated interventions can contribute with knowledge that can serve as evidence-based foundations for practical guidelines and recommendations. Experimental studies are needed in order to develop further knowledge.

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Conflict of interest

None declared.

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